1-6   (Canceled)

7.   (Currently Amended) A method for detecting unauthorized access of a cable system by a cable modem auxiliary device (CMAD), the method comprising:

     receiving at a cable modem termination system (CMTS) a DHCP request comprising a MAC address of a CMAD seeking access to the cable system and a MAC address of a cable modem (CM) to which the CMAD is connected;

     forming a proffered identifier of the CMAD by combining a gateway interface address of the CMTS with the CM MAC address and the CMAD MAC address;

     comparing the components of the proffered identifier to the components of each of one or more stored identifiers stored in a datastore;

     making a determination whether the proffered identifier and any of the one or more stored identifiers satisfy a matching criteria comprising a same CMAD MAC address component and a different gateway interface address component; and

     in the event the proffered identifier and any of the one or more stored identifiers satisfy the matching criteria, selecting a remedial response, wherein the remedial response comprises denying the CMAD access to the cable system.

8.   (Original) The method for detecting unauthorized access of a cable system by a CMAD of claim 7, wherein the datastore comprises a central database.

9.   (Original) The method for detecting unauthorized access of a cable system by a CMAD of claim 7, wherein the datastore comprises a distributed database.

10.   (Original) The method for detecting unauthorized access of a cable system by a CMAD of claim 7, wherein the cable system comprises a DHCP server linked to the CMTS and wherein the DHCP server makes the determination with respect to the matching criteria.

11.   (Currently Amended) The method for detecting unauthorized access of a cable system by a CMAD of claim 7, wherein the remedial response further comprises denying the CMAD access to the cable system, sending an advisory message to a network manager, and and recording the event in a log file.

12.   (Currently Amended) A method for detecting unauthorized access of a cable system by a CMAD, wherein the method comprises comprising:

     receiving at a cable modem termination system (CMTS) a DHCP request comprising a

          MAC address of a CMAD seeking access to the cable system and a MAC address of a

          cable modem (CM) to which the CMAD is connected;

     forming a proffered identifier of the CMAD by combining a gateway interface address of

          the CMTS with the CM MAC address and the CMAD MAC address;

     comparing the components of the proffered identifier to the components of each of one or

          more stored identifiers stored in a datastore;

     making a determination whether the proffered identifier and any of the one or more

          stored identifiers satisfies a matching criteria comprising a same CMAD MAC

          address component, a different CM MAC address component, and a same gateway

          interface address component; and

     in the event the proffered identifier and any of the one or more stored identifiers satisfy

          the matching criteria, selecting a remedial response, wherein the remedial response

          comprises denying the CMAD access to the cable system.

13.   (Original) The method for detecting unauthorized access of a cable system by a CMAD
of claim 12, wherein the datastore comprises a central database.

14.   (Original) The method for detecting unauthorized access of a cable system by a CMAD
of claim 12, wherein the datastore comprises a distributed database.

15.   (Original) The method for detecting unauthorized access of a cable system by a CMAD
of claim 12, wherein the cable system further comprises a DHCP server linked to the CMTS and
wherein the DHCP server makes the determination with respect to the matching criteria.

16.   (Currently Amended) The method for detecting unauthorized access of a cable system by
a CMAD of claim 12, wherein the remedial response further comprises ~~denying the CMAD
access to the cable system,~~ sending an advisory message to a network manager, ~~and~~ and
recording the event in a log file.

17.   (Currently Amended) A method for detecting unauthorized access of a cable system by a
cable modem auxiliary device (CMAD)~~, the method~~ comprising:

     receiving at a cable modem termination system (CMTS) a DHCP request comprising a

          MAC address of a CMAD seeking access to the cable system and a MAC address of a

          cable modem (CM) to which the CMAD is connected;

forming a proffered identifier of the CMAD by combining a gateway interface address of the CMTS with the CM MAC address and the CMAD MAC address;

comparing the components of the proffered identifier to the components of each of one or more stored identifiers stored in a datastore;

making a first determination whether the proffered identifier and any of the one or more stored identifiers satisfy a first matching criteria comprising a same CMAD MAC address component and a different gateway interface address component;

in the event the proffered identifier and any of the one or more stored identifiers satisfy the first matching criteria, selecting a remedial response, wherein the remedial response comprises denying the CMAD access to the cable system;

in the event the proffered identifier and any of the one or more stored identifiers do not satisfy the first matching criteria, making a second determination whether the proffered identifier and any of the one or more stored identifiers satisfies a second matching criteria comprising a same CMAD MAC address component, a different CM MAC address component, and a same gateway interface address component; and

in the event the proffered identifier and any of the one or more stored identifiers satisfy the second matching criteria, selecting a remedial response, wherein the remedial response comprises denying the CMAD access to the cable system.

18.   (Original) The method for detecting unauthorized access of a cable system by a CMAD of claim 17, wherein the datastore comprises a central database.

19.   (Original) The method for detecting unauthorized access of a cable system by a CMAD of claim 17, wherein the datastore comprises a distributed database.

20.   (Original) The method for detecting unauthorized access of a cable system by a CMAD of claim 17, wherein the cable system further comprises a DHCP server linked to the CMTS and wherein the DHCP server makes the determination with respect to the first matching criteria and the determination with respect to the second matching criteria.

21.   (Currently Amended) The method for detecting unauthorized access of a cable system by a CMAD of claim 17, wherein the remedial response further comprises ~~denying the CMAD access to the cable system,~~ sending an advisory message to a network manager~~, and~~ and recording the event in a log file.

22.   (Currently Amended) The method for detecting unauthorized access of a cable system by

a CMAD of claim 17, ~~wherein the method further comprises~~ further comprising in the event that the proffered identifier and any of the one or more stored identifiers do not satisfy the first matching criteria and the second matching criteria, storing the proffered identifier in the datastore.

23.   (Currently Amended) A method for detecting unauthorized access of a cable system by a cable modem auxiliary device (CMAD), wherein the cable system comprises a plurality of regional cable networks each having a regional datastore, the method comprising:

     receiving at a cable modem termination system (CMTS) a DHCP request comprising a
          MAC address of a CMAD seeking access to one of the plurality of regional cable
          networks and a MAC address of a cable modem (CM) to which the CMAD is
          connected;

     forming a proffered identifier of the CMAD by combining a gateway interface address of
          the CMTS with the proffered CM MAC address and the proffered CMAD MAC
          address;

     comparing the components of the proffered identifier to the components of each of one or
          more stored identifiers stored in a regional datastore;

     making a first determination whether the proffered identifier and any of the one or more
          regionally stored identifiers satisfy a first matching criteria comprising a same
          CMAD MAC address component and a different gateway interface address
          component;

     in the event the proffered identifier and any of the one or more regionally stored
          identifiers satisfy the matching criteria, selecting a remedial response, wherein the
          remedial response comprises denying the CMAD access to the cable system;

     in the event the proffered identifier and any of the one or more regionally stored
          identifiers do not satisfy the first matching criteria, making a second determination
          whether the proffered identifier and any of the one or more regionally stored
          identifiers satisfies a second matching criteria comprising a same CMAD MAC
          address component, a different CM MAC address component, and a same gateway
          interface address component;

     in the event the proffered identifier and any of the one or more regionally stored
          identifiers satisfy the second matching criteria, selecting a remedial response, wherein

the remedial response comprises denying the CMAD access to the cable system;

in the event that the proffered identifier and any of the one or more regionally stored
identifiers do not satisfy the first matching criteria and the second matching criteria,
comparing the components of the proffered identifier to the components of each of
one or more stored identifiers stored in a central datastore, wherein the central
datastore comprises regionally stored identifiers from each of the regional datastores;

making a third determination whether the proffered identifier and any of the one or more
centrally stored identifiers satisfy the first matching criteria comprising;

in the event the proffered identifier and any of the one or more centrally stored identifiers
satisfy the first matching criteria, selecting a remedial response, wherein the remedial
response comprises denying the CMAD access to the cable system;

in the event the proffered identifier and any of the one or more centrally stored identifiers
do not satisfy the first matching criteria, making a fourth determination whether the
proffered identifier and any of the one or more centrally stored identifiers satisfies the
second matching criteria; and

in the event the proffered identifier and any of the one or more centrally stored identifiers
satisfy the second matching criteria, selecting a remedial response, wherein the
remedial response comprises denying the CMAD access to the cable system.

24. (Original) The method for detecting unauthorized access of a cable system by a CMAD
of claim 23, wherein the regional datastore and the central datastore each comprise a central
database.

25. (Original) The method for detecting unauthorized access of a cable system by a CMAD
of claim 23, wherein the regional datastore and the central datastore each comprise a distributed
database.

26. (Original) The method for detecting unauthorized access of a cable system by a CMAD
of claim 23, wherein at least one of the plurality of regional cable networks further comprises a
DHCP server linked to the CMTS and wherein the DHCP server makes the first determination
and the second determination.

27. (Currently Amended) The method for detecting unauthorized access of a cable system by
a CMAD of claim 23, wherein the remedial response further comprises ~~denying the CMAD
access to the cable system,~~ sending an advisory message to a network manager~~, and~~ and

recording the event in a log file.

28.   (Currently Amended) The method for detecting unauthorized access of a cable system by a CMAD of claim 23~~, wherein the method further comprises~~further comprising in the event that the proffered identifier and any of the one or more centrally stored identifiers do not satisfy the first matching criteria and the second matching criteria, storing the proffered identifier in the regional datastore and the central datastore.

29-35 (Canceled)

36.   (Currently Amended) A system for detecting unauthorized access of a cable network by a cable ~~modem,~~modem auxiliary device (CMAD) ~~the system~~comprising:

a CMTS, ~~adapted to~~wherein the CMTS comprises instructions for:

    ~~receive~~receiving a DHCP request comprising a MAC address of a CMAD seeking access
        to the cable system and a MAC address of a cable modem (CM) to which the CMAD
        is connected; and

    ~~form~~forming a proffered identifier by combining a gateway interface address of the
        CMTS with the CM MAC address and the CMAD MAC address; and

a detection server linked to a datastore, wherein the detection server ~~adapted to~~comprises instructions for:

    ~~receive~~receiving the proffered identifier from the CMTS;

    ~~compare~~comparing the components of the proffered identifier to the components of each
        of one or more stored identifiers stored in the datastore;

    ~~determine~~determining whether the proffered identifier and any of the one or more stored
        identifiers satisfy a first matching criteria comprising a same CMAD MAC address
        component and a different gateway interface address component; and

    in the event the proffered identifier and any of the one or more stored identifiers satisfy
        the first matching criteria, ~~select~~selecting a remedial response, wherein the remedial
        response comprises denying the CMAD access to the cable system.

37.   (Currently Amended) The system of claim 36, wherein the detection server ~~is further adapted to~~further comprises instructions for:

    ~~determine~~determining whether the proffered identifier and any of the one or more stored
        identifiers satisfies a second matching criteria comprising a same CMAD MAC
        address component, a different CM MAC address component, and a same gateway

interface address component; and

in the event the proffered identifier and any of the one or more stored identifiers satisfy

the second matching criteria, ~~select~~selecting a remedial response, wherein the

remedial response comprises denying the CMAD access to the cable system.

38.   (Currently Amended) The system of claim 36, wherein the detection server ~~is further adapted to~~further comprises instructions for~~ in the event the proffered identifier and any of the one or more stored identifiers do not satisfy the first matching criteria and the second matching criteria, ~~store~~ storing the proffered identifier in the datastore.

39.   (Original) The system of claim 36, wherein the datastore comprises a central database.

40.   (Original) The system of claim 36, wherein the datastore comprises a distributed database.

41.   (Original) The system of claim 36, wherein the remedial response comprises denying the CMAD access to the cable system, sending an advisory message to a network manager, and recording the event in a log file.

42.   (Original) The system of claim 36, wherein the detection server comprises a DHCP server.

43.   (Currently Amended) A system for detecting unauthorized access of a cable network comprising a plurality of regional cable networks by a cable modem auxiliary device (CMAD)~~,~~ ~~the system~~ comprising:

a CMTS, ~~adapted to~~wherein the CMTS comprises instructions for:

      ~~receive~~receiving a DHCP request comprising a MAC address of a CMAD seeking access
            to one of the plurality of regional cable networks and a MAC address of a cable
            modem (CM) to which the CMAD is connected; and

      ~~form~~forming a proffered identifier by combining a gateway interface address of the
            CMTS with the CM MAC address and the CMAD MAC address; and

a regional detection server linked to a regional datastore, wherein the regional detection server ~~adapted to~~comprises instructions for:

      ~~receive~~receiving the proffered identifier from the CMTS;

      ~~compare~~comparing the components of the proffered identifier to the components of each
            of one or more stored identifiers stored in the regional datastore;

~~determine~~determining whether the proffered identifier and any of the one or more

regionally stored identifiers satisfy a first matching criteria comprising a same

CMAD MAC address component and a different gateway interface address

component;

in the event the proffered identifier and any of the one or more regionally stored

identifiers satisfy the first matching criteria, ~~select~~selecting a remedial response,

wherein the remedial response comprises denying the CMAD access to the cable

system;

in the event the proffered identifier and any of the one or more regionally stored

identifiers do not satisfy the first matching criteria, ~~determine~~determining whether the

proffered identifier and any of the one or more regionally stored identifiers satisfies a

second matching criteria comprising a same CMAD MAC address component, a

different CM MAC address component, and a same gateway interface address

component;

in the event the proffered identifier and any of the one or more regionally stored

identifiers satisfy the second matching criteria, ~~select~~selecting a remedial response,

wherein the remedial response comprises denying the CMAD access to the cable

system;

in the event that the proffered identifier and any of the one or more regionally stored

identifiers do not satisfy the first matching criteria and the second matching criteria,

~~send~~sending the proffered identifier to a central detection server; and

the central detection server linked to a central datastore, the central detection server ~~adapted~~

~~to~~comprising instructions for:

~~compare~~comparing the components of the proffered identifier to the components of each

of one or more stored identifiers stored in a central datastore, wherein the central

datastore comprises regionally stored identifiers from each of the regional datastores;

~~determine~~determining whether the proffered identifier and any of the one or more

centrally stored identifiers satisfy the first matching criteria;

in the event the proffered identifier and any of the one or more centrally stored identifiers

satisfy the first matching criteria, ~~select~~selecting a remedial response;

in the event the proffered identifier and any of the one or more centrally stored identifiers

do not satisfy the first matching criteria, ~~determine~~determining whether the proffered

identifier and any of the one or more centrally stored identifiers satisfies the second

matching criteria; and

in the event the proffered identifier and any of the one or more centrally stored identifiers

satisfy the second matching criteria, ~~select~~selecting a remedial response, wherein the

remedial response comprises denying the CMAD access to the cable wherein system.

44.   (Currently Amended) The system of claim 43, wherein the central detection ~~server is~~

~~further adapted to~~further comprises instructions for in the event the proffered identifier and any

of the one or more centrally stored identifiers do not satisfy the first matching criteria and the

second matching criteria, ~~store~~ storing the proffered identifier in the regional datastore and the

central datastore.

45.   (Original) The system of claim 43, wherein the regional datastore and the central

datastore each comprise a central database.

46.   (Original) The system of claim 43, wherein the regional datastore and the central

datastore each comprise a distributed database.

47.   (Currently Amended) The system of claim 43, wherein the remedial response further

comprises ~~denying the CMAD access to the cable system,~~ sending an advisory message to a

network manager, ~~and~~ and recording the event in a log file.

48.   (Original) The system of claim 43, wherein the regional detection server comprises a

DHCP server.

49-51 (Canceled)

52.   (New) The method for detecting unauthorized access of a cable system by a CMAD of

claim 7 further comprising in the event that the proffered identifier and any of the one or more

stored identifiers do not satisfy the matching criteria, storing the proffered identifier in the

datastore.

53.   (New) The method for detecting unauthorized access of a cable system by a CMAD of

claim 12 further comprising in the event that the proffered identifier and any of the one or more

stored identifiers do not satisfy the matching criteria, storing the proffered identifier in the

datastore.